

TERRAMAX[®] MOTORS SCA SERIES



TerraMAX SCA Series motors are IE2 Efficient Totally Enclosed Fan Cooled Cast Iron motors built on the TerraMAX Low Voltage platform. SCA Series motors inherit premium features of the futuristic TerraMAX motor platform family. The rugged construction of SCA motors endeavors to meet all the general industry requirement for every tough and demanding applications.

SPECIFICATIONS

- Output: 0.75kW to 375kW (1HP to 500HP)
- Pole: 2 to 8 Pole
- Frame: IEC 80 – 355
- Standards: Confirms to IEC 60034
- Supply: Available for voltage supply between
- 200V to 690V and frequency 50 or 60Hz
- Ambient: 40°C (Higher ambient on request)
- Construction: Cast Iron with Integrally Cast Feet
- Drive Suitability: Suitable for variable torque duty (10:1)
- Terminal Box: Sheet metal up to 225, Cast Iron for 250 and above
- Connection: ≤ 3kW: Star Connection, > 3kW: Delta Connection
- Protection: IP55 (Higher degree protection on request)
- Insulation: Class F with Class B temperature rise
- Bearings: Shielded bearings for IEC 80-180
- Fan: Bi-directional fan
- Mounting: All standard mountings B3, B5, B35, V1 (B14 and B34 for IEC 80-132)

OPTIONAL ACCESSORIES

Space heater, RTD (for IEC 200 and above), BTM (for IEC 160 and above), Cable glands, Brakes (IEC 180 and above), Encoders and canopy for V1 mounting. For additional details, please contact our technical support team

APPLICATIONS

- Machine tools
- Pumps
- Crane & hoist
- Material handling
- Fans
- Compressors
- Conveyors
- Packing equipments

CERTIFICATIONS (ON REQUEST)



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TERRAMAX® MOTORS SCA SERIES

PERFORMANCE DATA

Model No.	Frame	Rated (kW)	Speed (RPM)	50 Hz Supply										Moment of Inertia (kgm²)	Weight (kg)
				Full Load Amp			Power factor	Efficiency			Starting Current (I _{LR} /I _{RATED})	Starting Torque (T _{LR} /T _{RATED})	Breakdown Torque (T _{BD} /T _{RATED})		
				380V	400V	415V		100%	75%	50%					
2 POLE MOTORS															
SCAP751A.1..G.....	80M	0.75	2825	1.8	1.7	1.6	0.83	77.4	77.4	75.8	6.3	2.7	2.8	0.0008	16.0
SCA1P11A.1..G.....	80M	1.1	2825	2.5	2.4	2.3	0.84	79.6	79.6	78.8	6.3	2.6	2.8	0.0010	17.0
SCA1P51A.1..G.....	90S	1.5	2869	3.3	3.1	3.0	0.86	81.3	81.3	80.2	6.6	3.0	3.1	0.0018	23.1
SCA2P21A.1..G.....	90L	2.2	2868	4.6	4.3	4.2	0.88	83.2	83.2	83.0	7.2	3.5	3.2	0.0023	27.0
SCA0031A.1..G.....	100L	3.0	2879	6.1	5.8	5.5	0.89	84.6	84.6	84.4	7.5	3.3	3.2	0.0032	36
SCA3P71A.1..G.....	100L	3.7	2874	-	-	6.5	0.92	85.5	85.5	86.6	7.0	3.4	3.2	0.0044	42
SCA0041A.1..G.....	112M	4.0	2864	7.6	7.2	7.0	0.93	85.8	85.8	88.0	6.7	2.7	2.9	0.0050	45
SCA5P51A.1..G.....	132S	5.5	2908	10.3	9.8	9.5	0.93	87.0	87.0	88.0	7.7	2.5	3.1	0.0140	70
SCA7P51A.1..G.....	132S	7.5	2906	13.8	13.1	12.6	0.94	88.1	88.1	88.8	7.8	2.5	3.1	0.0155	74
SCA0111A.1..G.....	160M	11	2940	21.0	20.0	19.2	0.89	89.4	89.4	88.2	7.5	2.4	2.9	0.0430	117
SCA0151A.1..G.....	160M	15	2940	28.4	26.9	26.0	0.89	90.3	90.3	89.1	7.5	2.6	3.0	0.0520	127
SCA18P1A.1..G.....	160L	18.5	2940	34	33	31	0.90	90.9	90.9	89.8	7.5	2.9	3.1	0.0650	149
SCA0221A.1..G.....	180M	22	2946	40	38	36	0.92	91.3	91.3	91.8	7.2	2.4	3.2	0.0928	196
SCA0331A.1..G.....	200L	30	2953	55	52	50	0.90	92.0	92.0	91.5	6.3	1.9	3.0	0.1687	258
SCA0371A.1..G.....	200L	37	2953	68	64	62	0.90	92.5	92.5	92.2	6.5	2.0	3.1	0.1867	273
SCA0451A.1..G.....	225M	45	2968	82	78	75	0.90	92.9	92.9	93.2	6.5	1.9	3.0	0.3376	383
SCA0551A.1..G.....	250M	55	2973	101	96	92	0.89	93.2	93.2	92.8	6.7	1.9	3.2	0.4602	477
SCA0751A.1..G.....	280S	75	2978	135	128	124	0.90	93.8	93.8	93.1	7.2	2.0	3.4	0.7438	609
SCA0901A.1..G.....	280M	90	2979	161	153	148	0.90	94.1	94.1	93.6	7.6	2.3	3.5	0.8662	677
SCA1101A.1..G.....	315S	110	2980	197	187	180	0.90	94.3	94.3	92.4	6.4	1.8	3.1	1.9330	908
SCA1321A.1..G.....	315M	132	2980	233	221	213	0.91	94.6	94.6	93.0	6.3	1.8	3.0	2.1620	960
SCA1601A.1..G.....	315L	160	2980	282	268	258	0.91	94.8	94.8	93.7	6.2	1.8	2.9	2.3720	1058
SCA2001A.1..G.....	315L	200	2984	352	334	322	0.91	95.0	95.0	94.4	7.3	2.3	3.4	3.0910	1231
SCA2501A.1..G.....	355M	250	2983	444	422	407	0.90	95.0	95.0	94.2	6.9	2.0	3.3	4.0730	1717
SCA3151A.1..G.....	355L	315	2984	560	532	513	0.90	95.0	95.0	94.9	7.0	2.1	3.3	4.7430	1856
SCA3551A.1..G.....	355L	355	2987	638	606	584	0.89	95.0	95.0	95.0	8.6	2.8	3.9	5.7960	2083
SCA3751A.1..G.....	355L	375	2986	666	633	610	0.90	95.0	95.0	95.2	8.1	2.6	3.7	5.7960	2083
4 POLE MOTORS															
SCAP752A.1..G.....	80M	0.75	1415	1.9	1.8	1.7	0.75	79.6	79.6	77.2	5.8	3.1	3.3	0.0020	15.0
SCA1P12A.1..G.....	90S	1.1	1438	2.6	2.4	2.4	0.80	81.4	81.4	78.7	6.1	2.6	2.5	0.0034	24.6
SCA1P52A.1..G.....	90L	1.5	1434	3.4	3.3	3.2	0.80	82.8	82.8	80.1	6.1	2.8	2.5	0.0039	27.4
SCA2P22A.1..G.....	100L	2.2	1441	4.9	4.7	4.5	0.81	84.3	84.3	82.3	6.4	2.7	3.0	0.0062	35
SCA0032A.1..G.....	100L	3.0	1434	6.3	6.0	5.8	0.84	85.5	85.5	85.3	6.4	2.8	3.0	0.0074	38
SCA3P72A.1..G.....	112M	3.7	1445	-	-	6.9	0.87	86.3	86.3	87.3	6.0	2.3	2.6	0.0145	48
SCA0042A.1..G.....	112M	4.0	1450	8.4	7.9	7.7	0.84	86.6	86.6	86.5	7.3	2.7	3.0	0.0145	48
SCA5P52A.1..G.....	132S	5.5	1444	11.1	10.5	10.1	0.86	87.7	87.7	89.0	7.1	2.7	3.0	0.0228	75
SCA7P52A.1..G.....	132M	7.5	1451	15.3	14.5	14.0	0.84	88.7	88.7	88.9	8.3	3.4	3.5	0.0270	84
SCA0112A.1..G.....	160M	11	1465	22.2	21.0	20.3	0.84	89.8	89.8	88.4	6.8	2.3	2.7	0.0900	122
SCA0152A.1..G.....	160L	15	1465	29.6	28.1	27.1	0.85	90.6	90.6	89.3	6.5	2.4	2.6	0.1180	140
SCA18P2A.1..G.....	180M	18.5	1469	35	34	32	0.87	91.2	91.2	91.7	6.2	2.2	2.7	0.1433	193
SCA0222A.1..G.....	180L	22	1471	42	40	39	0.86	91.6	91.6	91.8	6.8	2.5	3.0	0.1694	215
SCA0332A.1..G.....	200L	30	1471	58	55	53	0.85	92.3	92.3	93.0	6.2	2.2	2.8	0.2616	269
SCA0372A.1..G.....	225S	37	1477	70	66	64	0.87	92.7	92.7	93.6	6.2	2.0	2.7	0.5062	344
SCA0452A.1..G.....	225M	45	1475	84	80	77	0.87	93.1	93.1	94.0	6.2	2.1	2.7	0.5637	369
SCA0552A.1..G.....	250M	55	1482	104	99	95	0.86	93.5	93.5	93.9	6.8	2.3	2.8	0.7712	484
SCA0752A.1..G.....	280S	75	1483	138	131	126	0.88	94.0	94.0	94.0	5.8	1.8	2.6	1.6330	648
SCA0902A.1..G.....	280M	90	1485	167	159	153	0.87	94.2	94.2	94.2	6.8	2.2	3.0	1.8420	721
SCA1102A.1..G.....	315S	110	1485	201	191	184	0.88	94.5	94.5	94.9	5.7	1.6	2.6	2.9320	886
SCA1322A.1..G.....	315M	132	1486	241	229	220	0.88	94.7	94.7	95.1	6.2	1.8	2.8	3.2420	937
SCA1602A.1..G.....	315L	160	1487	291	277	267	0.88	94.9	94.9	95.5	6.3	1.9	2.8	3.9770	1086
SCA2002A.1..G.....	315L	200	1486	359	341	329	0.89	95.1	95.1	95.9	6.1	1.9	2.6	5.0620	1243
SCA2502A.1..G.....	355M	250	1490	449	426	411	0.89	95.1	95.1	95.7	6.5	1.9	2.5	8.4430	1728
SCA3152A.1..G.....	355L	315	1489	565	537	518	0.89	95.1	95.1	96.1	6.2	1.8	2.3	9.2130	1813
SCA3552A.1..G.....	355L	355	1490	630	599	577	0.90	95.1	95.1	96.2	6.9	2.1	2.5	10.945	1978
SCA3752A.1..G.....	355L	375	1490	666	632	610	0.90	95.1	95.1	96.3	6.6	2.1	2.4	11.138	2003

Blue Shaded: For sale by Marathon Electric operations in India only. Performance per IS:12615

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PERFORMANCE DATA

Model No.	Frame	Rated (kW)	50 Hz Supply											Moment of Inertia (kgm²)	Weight (kg)
			Speed (RPM)	Full Load Amp			Power factor	Efficiency			Starting Current (I _{LR} /I _{RATED})	Starting Torque (T _{LR} /T _{RATED})	Breakdown Torque (T _{BD} /T _{RATED})		
				380V	400V	415V		100%	75%	50%					
6 POLE MOTORS															
SCAP753A.1..G.....	90S	0.75	913	1.9	1.9	1.8	0.77	75.9	75.9	75.1	3.9	2.2	2.2	0.0036	22.9
SCA1P13A.1..G.....	90L	1.1	912	2.8	2.7	2.6	0.76	78.1	78.1	77.5	4.1	2.4	2.4	0.0048	27.0
SCA1P53A.1..G.....	100L	1.5	931	3.7	3.5	3.4	0.77	79.8	79.8	79.0	4.8	2.7	2.7	0.0058	37
SCA2P23A.1..G.....	112M	2.2	962	5.2	5.0	4.8	0.78	81.8	81.8	80.2	6.0	2.3	2.6	0.0180	44
SCA0033A.1..G.....	132S	3.0	957	7.0	6.7	6.4	0.78	83.3	83.3	83.6	6.1	2.5	2.8	0.0211	69
SCA3P73A.1..G.....	132S	3.7	955	-	-	7.9	0.77	84.3	84.3	85.3	6.0	2.6	2.8	0.0256	76
SCA0043A.1..G.....	132M	4.0	953	9.1	8.6	8.3	0.79	84.6	84.6	85.1	6.0	2.6	2.7	0.0256	78
SCA5P53A.1..G.....	132M	5.5	956	12.6	12.0	11.6	0.77	86.0	86.0	85.3	6.7	3.1	3.2	0.0332	90
SCA7P53A.1..G.....	160M	7.5	970	17.0	16.1	15.5	0.77	87.2	87.2	86.2	5.9	2.4	3.6	0.1140	119
SCA0113A.1..G.....	160L	11	970	24.2	22.9	22.1	0.78	88.7	88.7	87.3	5.8	2.4	3.4	0.1530	139
SCA0153A.1..G.....	180L	15	974	31	29.4	28.4	0.82	89.7	89.7	89.4	5.3	2.0	2.3	0.1992	201
SCA18P3A.1..G.....	200L	18.5	977	37	36	34	0.83	90.4	90.4	90.9	5.1	1.7	2.1	0.3254	249
SCA0223A.1..G.....	200L	22	977	44	42	41	0.83	90.9	90.9	91.4	5.3	1.8	2.2	0.3694	266
SCA0303A.1..G.....	225M	30	983	60	57	55	0.83	91.7	91.7	92.6	5.6	2.0	2.3	0.7554	375
SCA0373A.1..G.....	250M	37	987	73	69	66	0.84	92.2	92.2	92.2	6.7	2.3	2.9	1.0661	474
SCA0453A.1..G.....	280S	45	984	86	81	79	0.86	92.7	92.7	93.6	5.7	2.0	2.4	1.9403	616
SCA0553A.1..G.....	280M	55	984	104	99	96	0.86	93.1	93.1	93.9	5.7	2.0	2.3	2.2355	677
SCA0753A.1..G.....	315S	75	989	147	139	134	0.83	93.7	93.7	94.4	5.1	1.6	2.2	3.3734	822
SCA0903A.1..G.....	315M	90	990	175	167	160	0.83	94.0	94.0	94.7	5.2	1.7	2.2	3.9282	888
SCA1103A.1..G.....	315L	110	990	211	200	193	0.84	94.3	94.3	95.0	5.4	1.8	2.2	4.7728	1012
SCA1323A.1..G.....	315L	132	990	252	240	231	0.84	94.6	94.6	95.2	5.5	1.9	2.2	5.4662	1080
SCA1603A.1..G.....	355M	160	991	298	283	273	0.86	94.8	94.8	95.5	6.1	1.9	2.5	8.5699	1609
SCA2003A.1..G.....	355M	200	991	372	353	341	0.86	95.0	95.0	95.8	6.0	1.9	2.4	9.9148	1724
SCA2503A.1..G.....	355L	250	991	460	437	421	0.87	95.0	95.0	95.7	6.1	2.0	2.4	11.708	1867
SCA2803A.1..G.....	355L	280	990	515	489	471	0.87	95.0	95.0	95.6	6.1	2.0	2.4	12.717	1959
8 POLE MOTORS															
SCAP754A.1..G.....	100L	0.75	723	2.6	2.5	2.4	0.66	66.2	66.2	66.2	4.7	1.8	2.7	0.0149	36
SCA1P14A.1..G.....	100L	1.1	722	3.6	3.4	3.3	0.66	70.8	70.8	70.8	4.9	2.0	2.7	0.0172	39
SCA1P54A.1..G.....	112M	1.5	718	4.7	4.4	4.3	0.66	74.1	74.1	72.5	4.4	2.0	2.4	0.0200	52
SCA2P24A.1..G.....	132S	2.2	709	6.2	5.9	5.7	0.69	77.6	77.6	76.9	4.0	1.9	2.2	0.0640	79
SCA0034A.1..G.....	132M	3.0	706	8.3	7.8	7.6	0.69	80.0	80.0	79.5	4.1	2.0	2.3	0.0764	90
SCA3P74A.1..G.....	160 M	3.7	715	-	-	9.0	0.70	81.4	81.4	81.4	6.0	1.9	2.1	0.0890	102
SCA0044A.1..G.....	160M	4.0	715	10.6	10.1	9.7	0.70	81.9	81.9	81.4	6.0	1.9	2.1	0.0890	102
SCA5P54A.1..G.....	160M	5.5	720	13.9	13.2	12.7	0.72	83.8	83.8	83.3	6.0	2.0	2.1	0.1090	115
SCA7P54A.1..G.....	160L	7.5	720	18.3	17.4	16.8	0.73	85.3	85.3	84.6	6.0	2.0	2.1	0.1450	135
SCA0114A.1..G.....	180L	11	723	27.5	26.1	25.2	0.70	86.9	86.9	86.8	4.5	2.0	2.1	0.3646	236
SCA0154A.1..G.....	200L	15	730	35	34	32	0.73	88.0	88.0	89.0	6.1	1.9	3.0	0.7327	300
SCA18P4A.1..G.....	225S	18.5	737	45	42	41	0.71	88.6	88.6	89.1	4.7	1.9	2.4	1.0860	403
SCA0224A.1..G.....	225M	22	736	51	48	46	0.74	89.1	89.1	89.7	4.3	1.7	2.1	1.1910	426
SCA0304A.1..G.....	250M	30	738	66	63	60	0.77	89.8	89.8	90.8	4.9	1.9	2.3	2.1620	552
SCA0374A.1..G.....	280S	37	738	84	80	77	0.74	90.3	90.3	92.6	4.6	1.9	2.3	3.2580	691
SCA0454A.1..G.....	280M	45	738	94	90	86	0.80	90.7	90.7	93.1	4.7	1.9	2.1	3.5330	743
SCA0554A.1..G.....	315S	55	742	128	121	117	0.72	91.0	91.0	91.3	4.3	1.8	2.0	3.7900	853
SCA0754A.1..G.....	315M	75	743	170	162	156	0.73	91.6	91.6	92.1	4.4	1.9	2.0	4.8300	959
SCA0904A.1..G.....	315L	90	743	201	191	184	0.74	91.9	91.9	92.5	4.5	1.9	2.0	5.6620	1042
SCA1104A.1..G.....	355M	110	743	229	218	210	0.79	92.3	92.3	93.8	5.8	1.6	2.7	7.8320	1545
SCA1324A.1..G.....	355M	132	743	271	257	248	0.8	92.6	92.6	94.2	5.9	1.6	2.6	8.9260	1636
SCA1504A.1..G.....	355M	150	742	299	284	274	0.82	92.9	92.9	94.7	5.5	1.5	2.4	9.9100	1727
SCA1604A.1..G.....	355M	160	743	327	310	299	0.80	93.0	93.0	94.4	6.1	1.8	2.7	10.566	1783
SCA1854A.1..G.....	355M	185	743	372	353	341	0.81	93.3	93.3	94.7	6.1	1.8	2.7	12.097	1916
SCA2004A.1..G.....	355L	200	742	392	372	359	0.83	93.5	93.5	95.1	5.8	1.7	2.5	13.190	2011
SCA2204A.1..G.....	355L	220	743	431	409	394	0.83	93.5	93.5	95.1	5.9	1.7	2.5	14.721	2140

Blue Shaded: For sale by Marathon Electric operations in India only. Performance per IS:12615

The scope of WEG Group solutions
is not limited to products and solutions
presented in this catalogue.

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The values shown are subject to change without prior notice.
The information contained is reference values.